

The Hawaii-based Longline Logbook Summary Report January-March 2006¹

Pacific Islands Fisheries Science Center
Fishery Monitoring and Economics Program

All Federal longline logbook data for trips completed in the first quarter of 2006 by Hawaii-based longline vessels have been received and processed and are summarized in this report. Most data from trips that began late in the first quarter and continued into the second quarter are included, but this report should still be considered preliminary because some data may be forthcoming.

Since April 2, 2004, the Hawaii-based shallow-set longline fishery for swordfish has operated under rules that have restricted the amount of fishing effort, the kinds of hooks used, and bait types. Also, separate species-specific limit on sea turtle interactions are in effect for the swordfish fishery. The Hawaii-based shallow-set longline fishery for swordfish reached the 2006 annual limit of 17 interactions with loggerhead sea turtles. As a result, this fishery was closed on March 20, 2006. However, the deep-set longline fishery for tunas continues to operate.

A total of 116 vessels were active in the fishery during the first quarter of 2006, 2 fewer than in the same period last year (Fig. 1). There were 387 longline trips in the first quarter of 2006, 66 fewer than the previous year. The total was composed of 332 deep-set tuna-targeted and 55 shallow-set swordfish-targeted trips (Fig. 2). The total number of hooks set in this quarter was 7.7 million, down 12% from the same quarter last year (Fig. 3). The largest proportion was set outside of the U.S. Exclusive Economic Zone (EEZ) (45%) followed by the main Hawaiian Islands (MHI) EEZ (34%). Other effort was recorded in the Northwestern Hawaiian Islands (NWHI) (14%) and in the EEZ of other U.S. possessions (7%).

The catch of bigeye tuna reached a record 30,173 fish in the first quarter of 2006 (Fig. 4); 44% were caught outside the U.S. EEZ and 29% in the MHI EEZ. Bigeye tuna CPUE on tuna-targeted trips was 4.1 fish per 1000 hooks (Fig. 5). Albacore catch dropped by 21% (3,946 fish) while CPUE remained at 0.5 fish per 1000 hooks (Figs. 6-7). Yellowfin tuna catch (11,344 fish) was down 17%, but the CPUE (1.6 fish per 1000 hooks) was the same as last year (Figs. 8-9).

Swordfish catch (13,801 fish) increased 52% from the same period last year (Fig. 10). Swordfish CPUE on swordfish-targeted trips (trips employing swordfish certificates) in the first quarter was a record 19.1 fish per 1000 hooks, whereas swordfish CPUE on tuna-targeted trips was only 0.1 fish per 1000 hooks (Fig. 11). Striped marlin catch (2,654 fish) and CPUE (0.4 fish per 1000 hooks) values were below those of last year (Figs. 12-13). Blue marlin catch and CPUE were 711 fish and 0.1 fish per 1000 hooks, respectively (Figs. 14-15).

A total of 21,766 sharks were caught in the first quarter of 2006, of which 2% (450 fish) were kept. Blue shark comprised 88% of the total shark catch (19,109 fish) (Fig. 16). Blue shark CPUE on swordfish-targeted trips was 13.4 fish per 1000 hooks (Fig. 17).

¹ PIFSC Data Report DR-06-002
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Table 1.--Western Pacific longline logbook summary for 1/2006 through 3/2006, incorporating data from all sets by vessels landing or based in Hawaii.

(Date of haul; Area totals; All areas)

Trip information			
Number of vessels		116	
Number of trips		387	
Number of sets		4,194	
Number of hooks set		7,719,382	
Number of light sticks used		371,707	
Species catch information			
Species class			# caught
Species	# kept	# caught	per 1000 hooks
Pelagic Management Unit Species (PMUS)			
Billfish			
Blue Marlin	708	711	0.09
Spearfish	3,849	3,882	0.50
Striped Marlin	2,636	2,654	0.34
Swordfish	12,932	13,801	1.79
Other	42	42	0.01
Total	20,167	21,090	2.73
Sharks			
Blue	13	19,109	2.48
Mako	354	1,173	0.15
Thresher	71	1,023	0.13
Other	12	461	0.06
Total	450	21,766	2.82
Tuna			
Albacore	3,819	3,946	0.51
Bigeye	29,272	30,173	3.91
Bluefin	1	1	0.00
Skipjack	2,142	2,294	0.30
Yellowfin	10,858	11,344	1.47
Other	5	5	0.00
Total	46,097	47,763	6.19
Other PMUS			
Mahimahi	17,863	18,157	2.35
Moonfish	1,266	1,279	0.17
Oilfish	6,555	6,762	0.88
Pomfret	8,451	8,507	1.10
Wahoo	3,606	3,635	0.47
Total	37,741	38,340	4.97
Miscellaneous			
Non-PMUS	267	1,740	0.23

Date and time of summary:

05/11/06 (08:53:31)

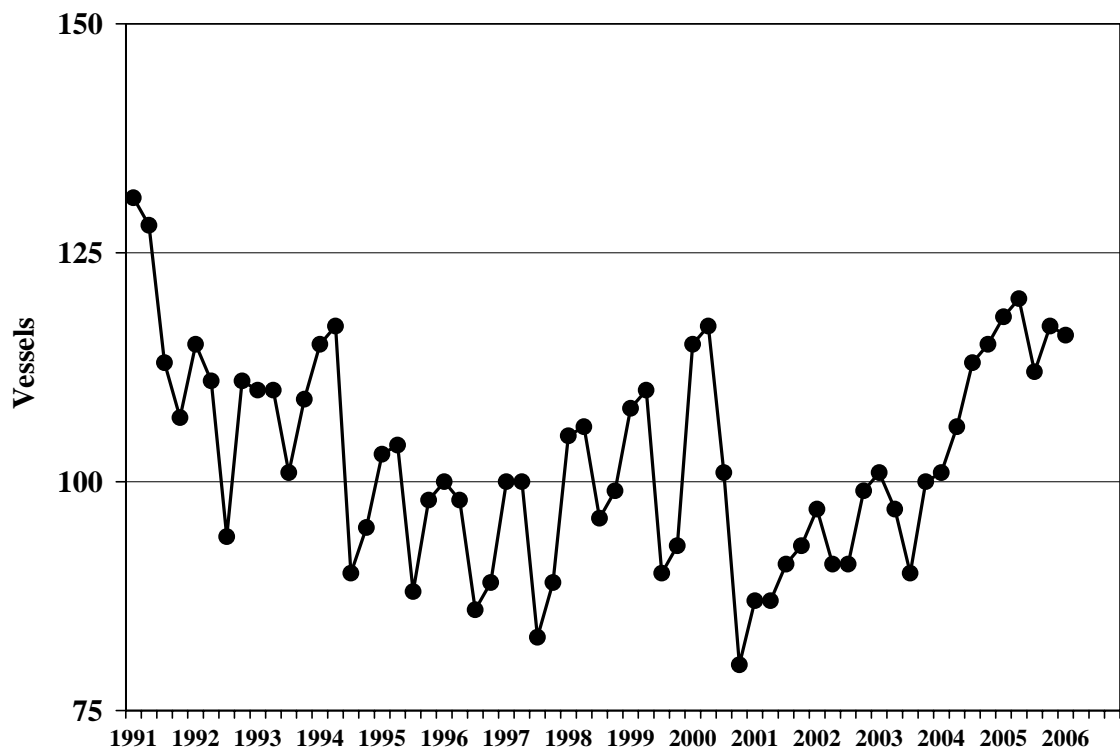


Figure 1.—Active Hawaii-based longline vessels, 1991-2006.

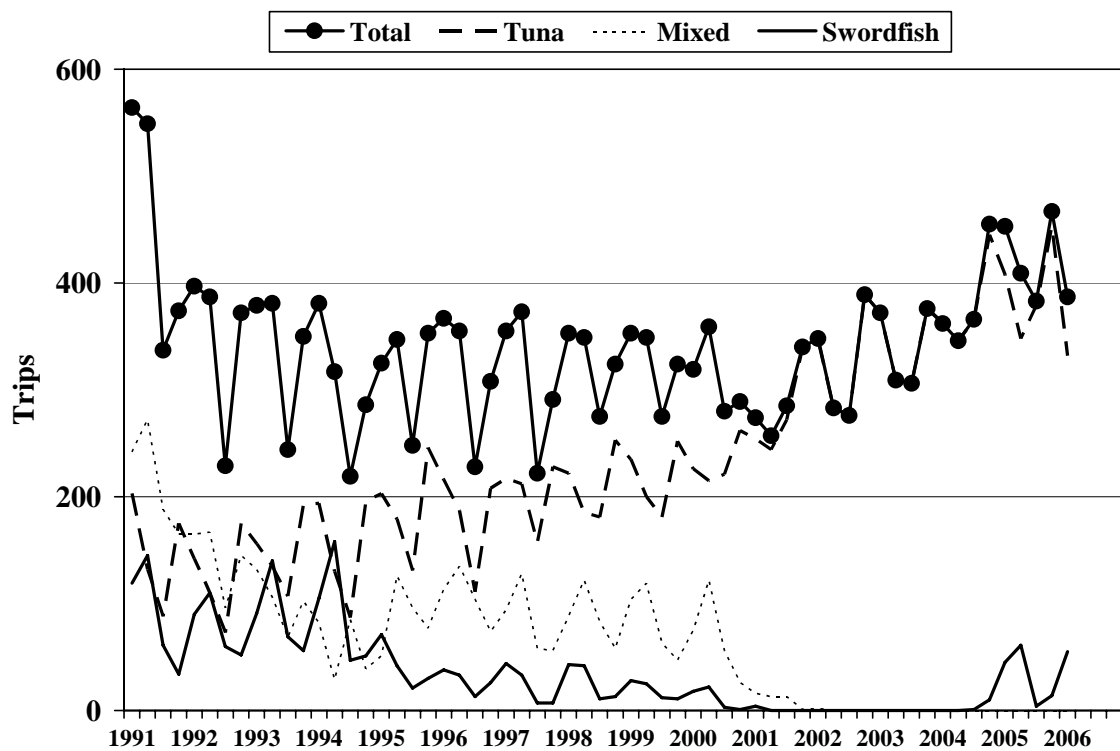


Figure 2.—Trips made by Hawaii-based longline vessels, 1991-2006.

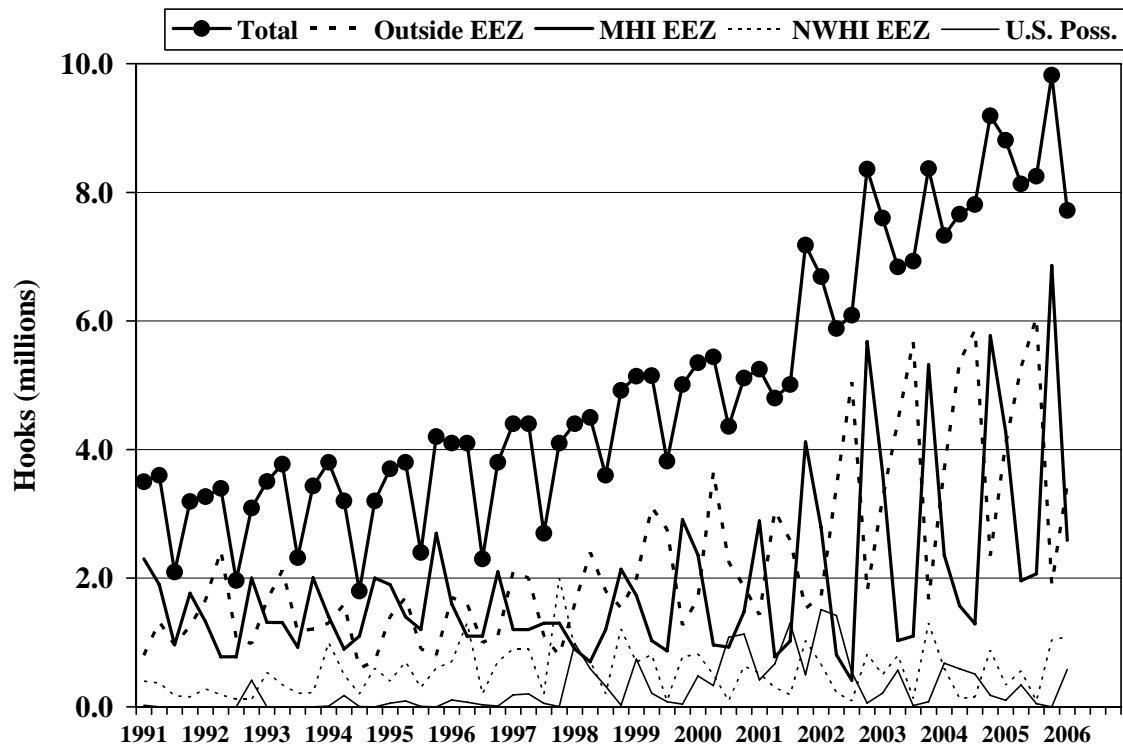


Figure 3.—Hooks set by the Hawaii-based longline fishery by quarter, 1991-2006.

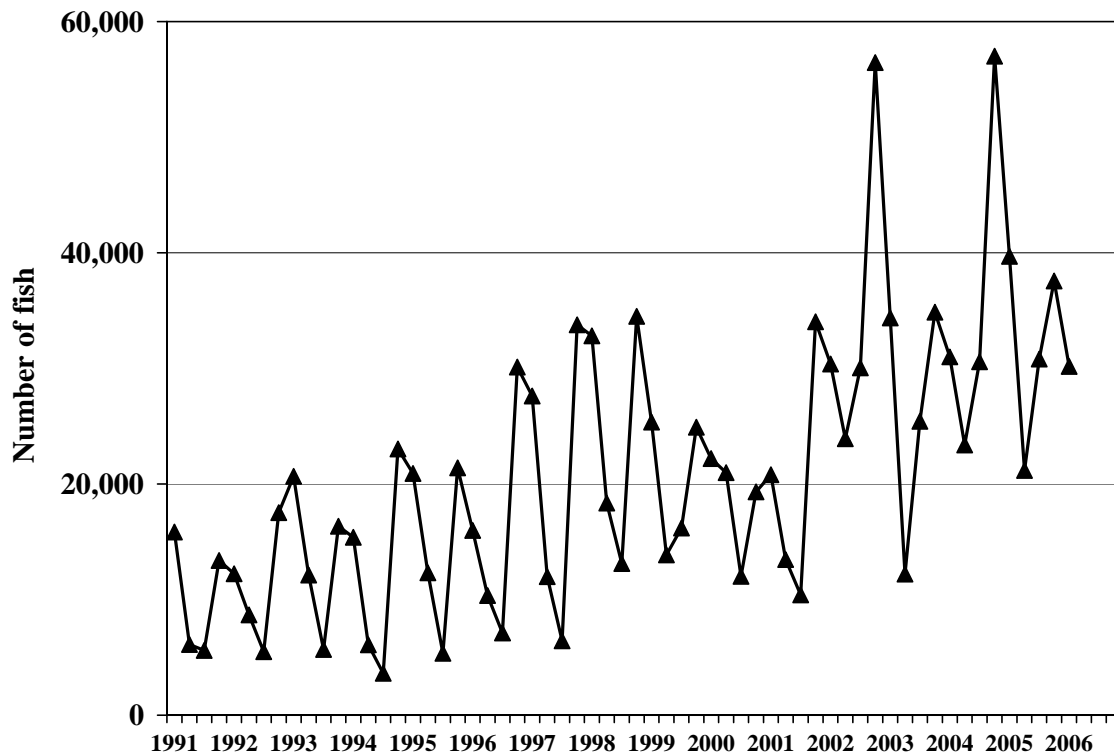


Figure 4.—Hawaii-based longline catch of bigeye tuna by quarter, 1991-2006.

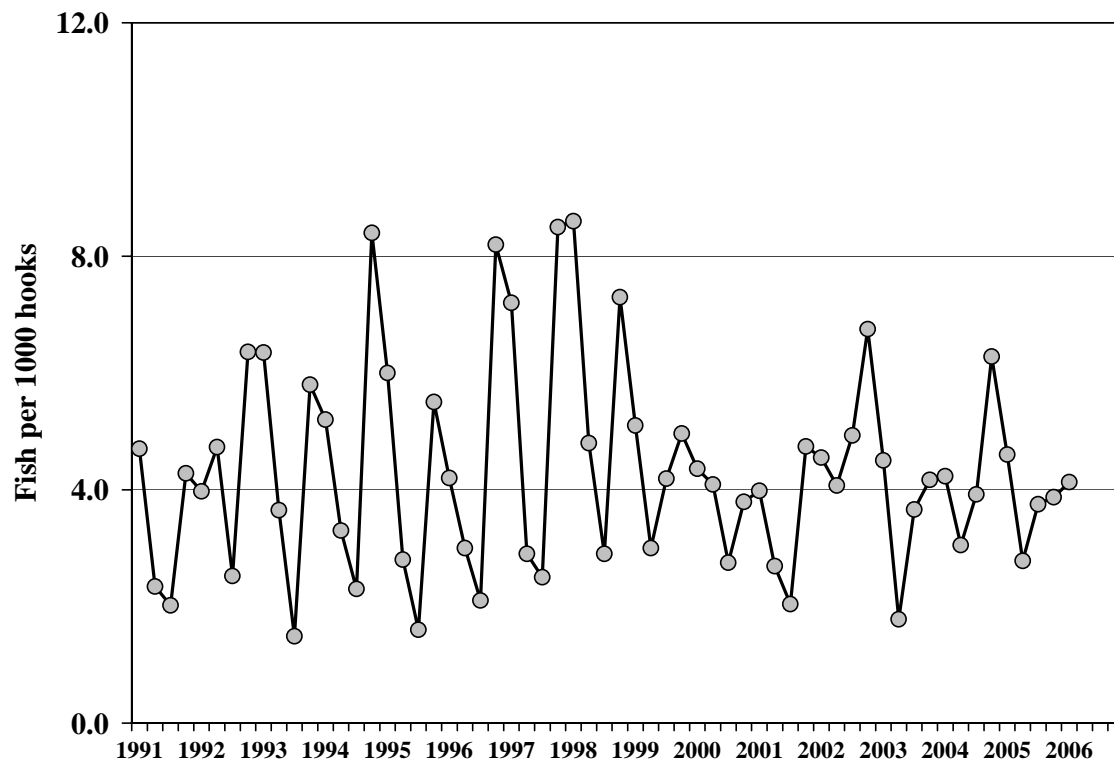


Figure 5.—Bigeye tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

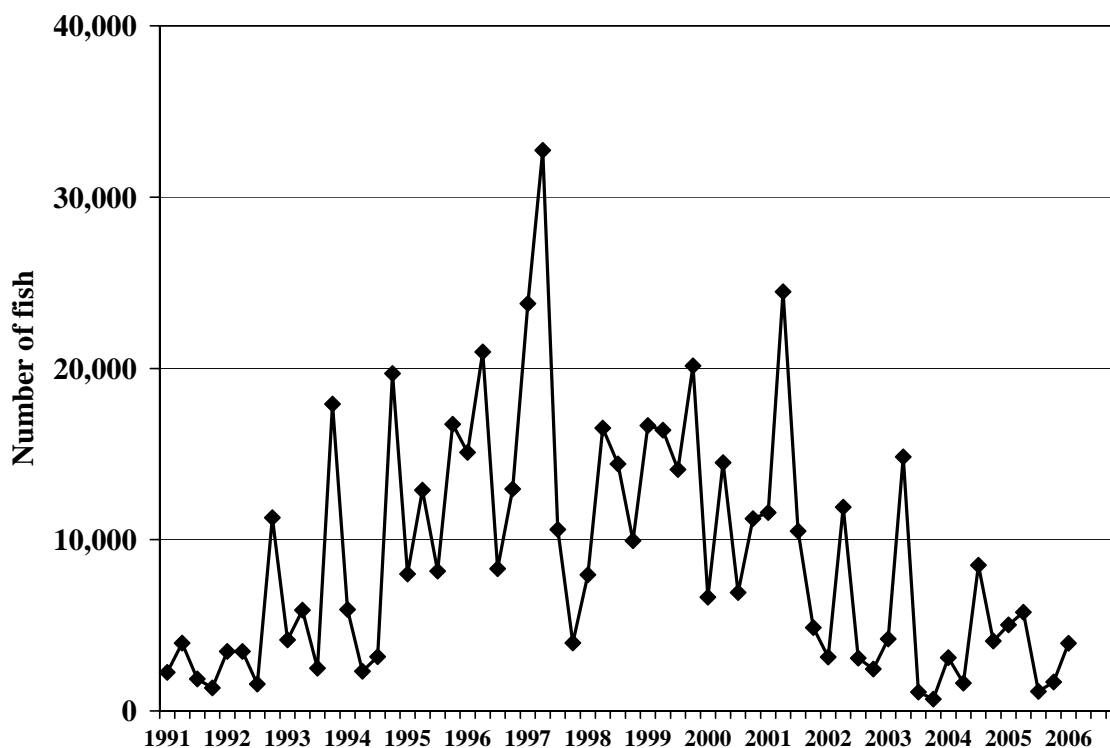


Figure 6.—Hawaii-based longline catch of albacore by quarter, 1991-2006.

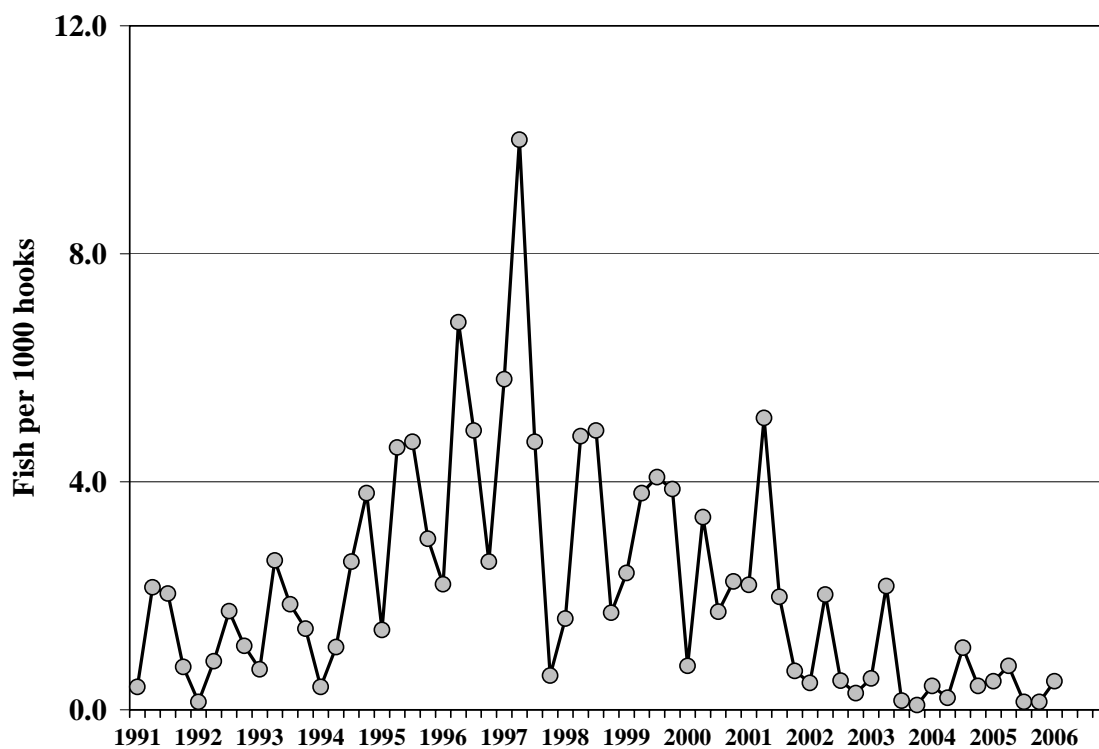


Figure 7.—Albacore CPUE for tuna-targeted trips by quarter, 1991-2006.

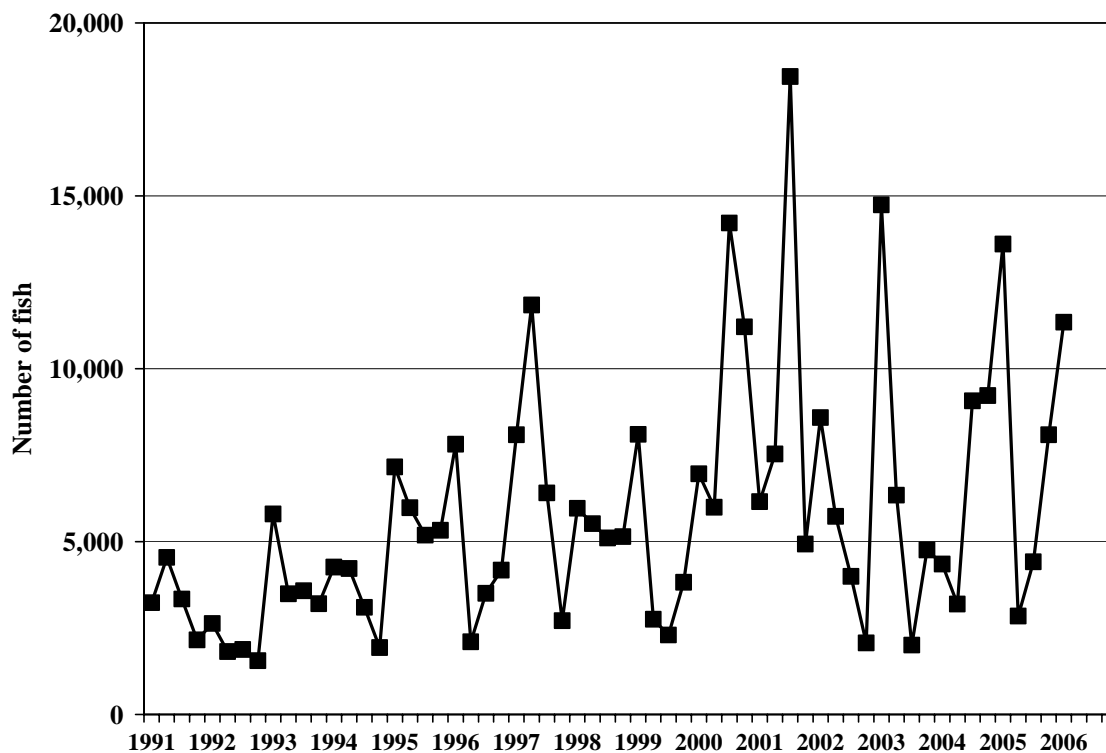


Figure 8.—Hawaii-based longline catch of yellowfin tuna by quarter, 1991-2006.

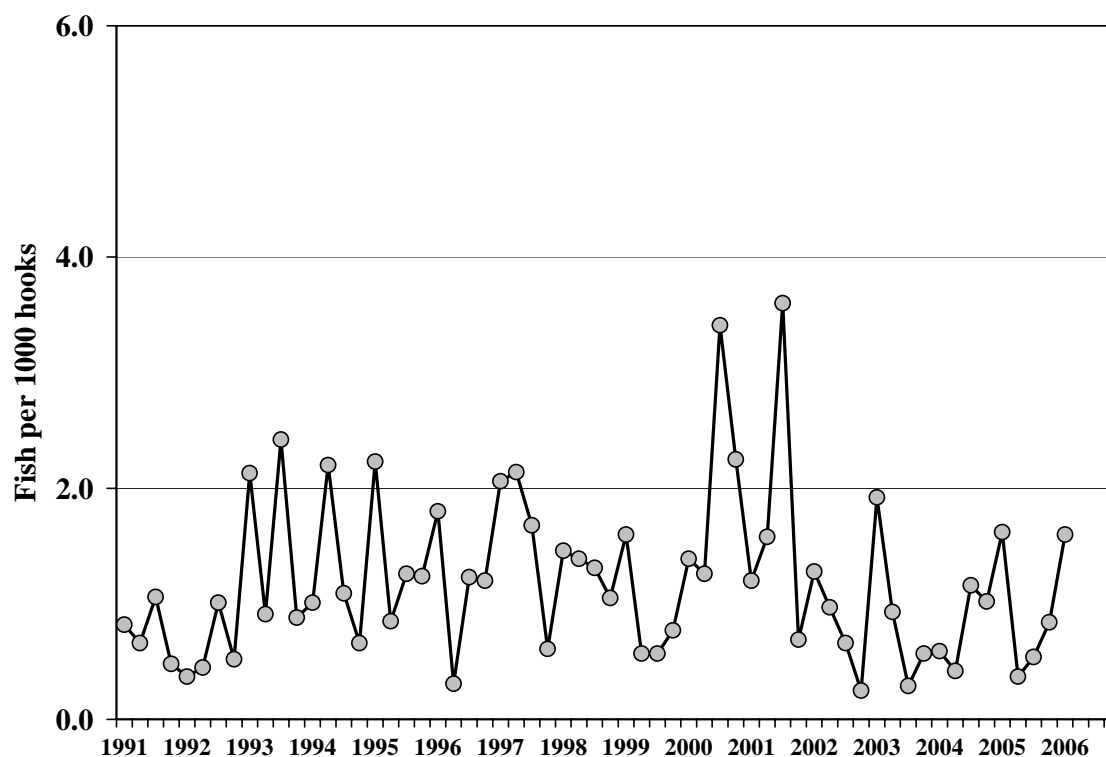


Figure 9.—Yellowfin tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

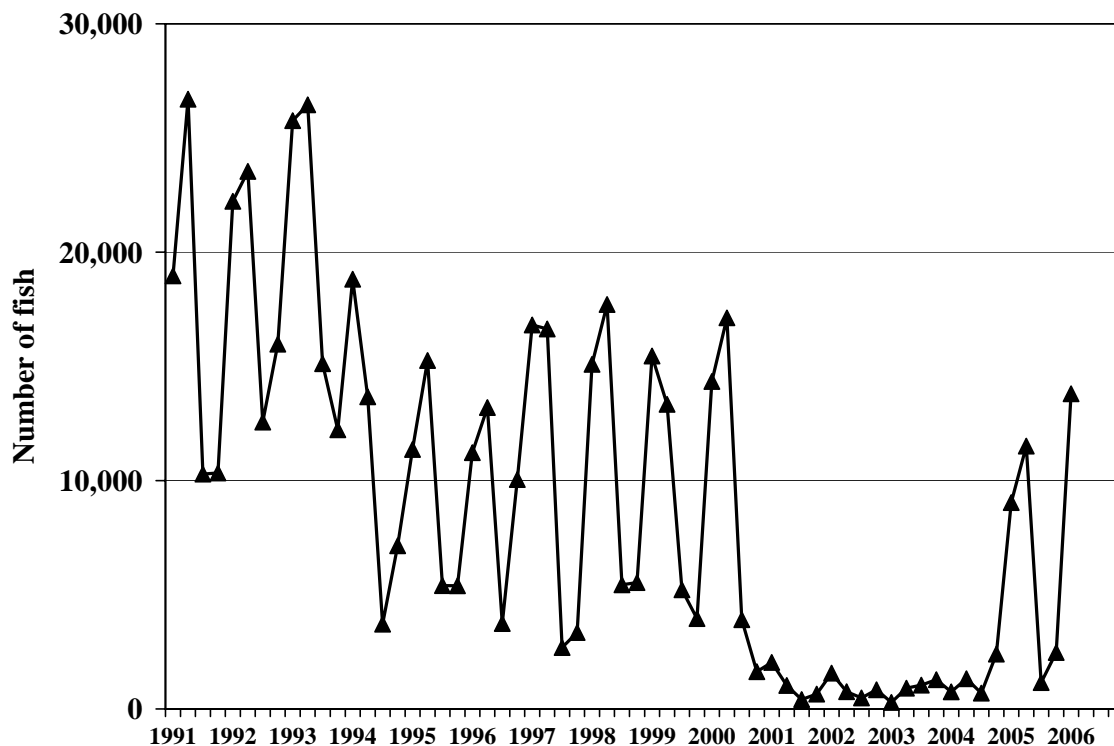


Figure 10.—Hawaii-based longline catch of swordfish by quarter, 1991-2006.

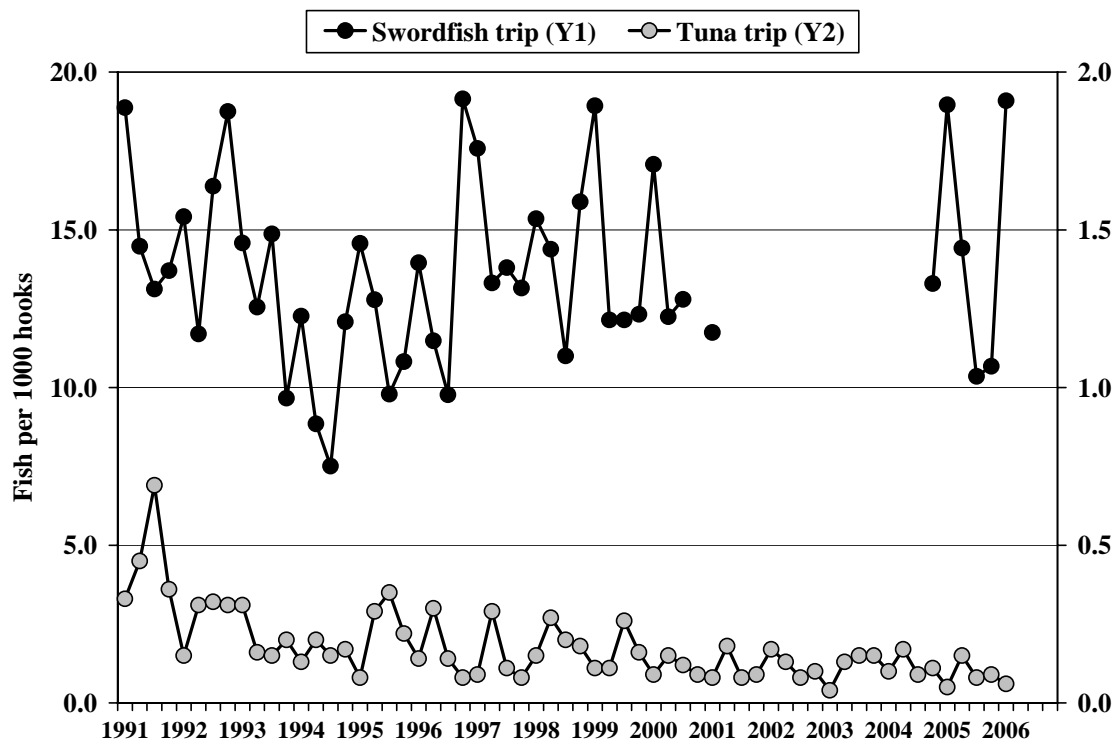


Figure 11.—Swordfish CPUE by quarter, 1991-2006.

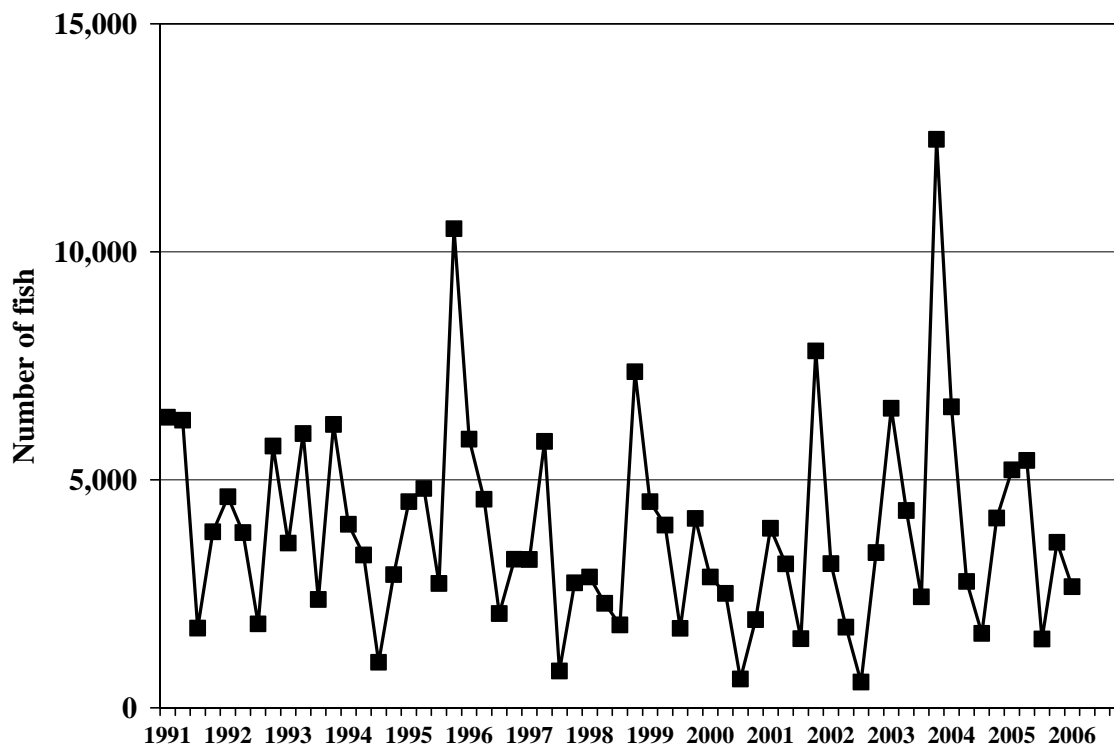


Figure 12.—Hawaii-based longline catch of striped marlin by quarter, 1991-2006.

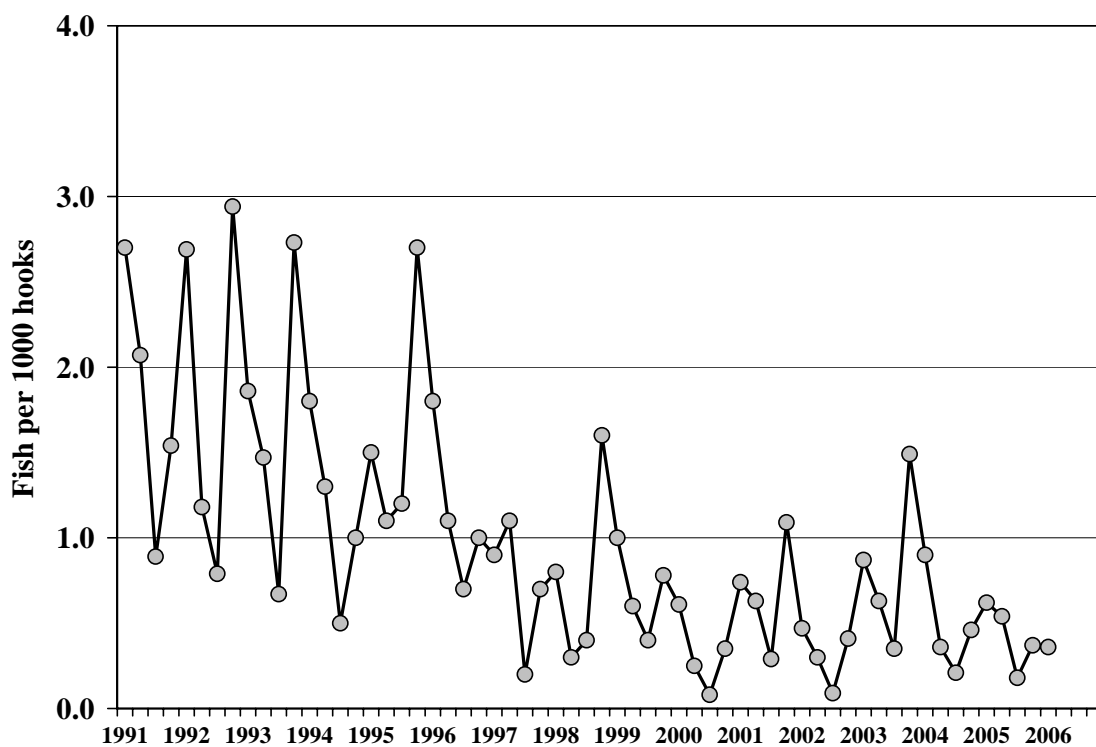


Figure 13.—Striped marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

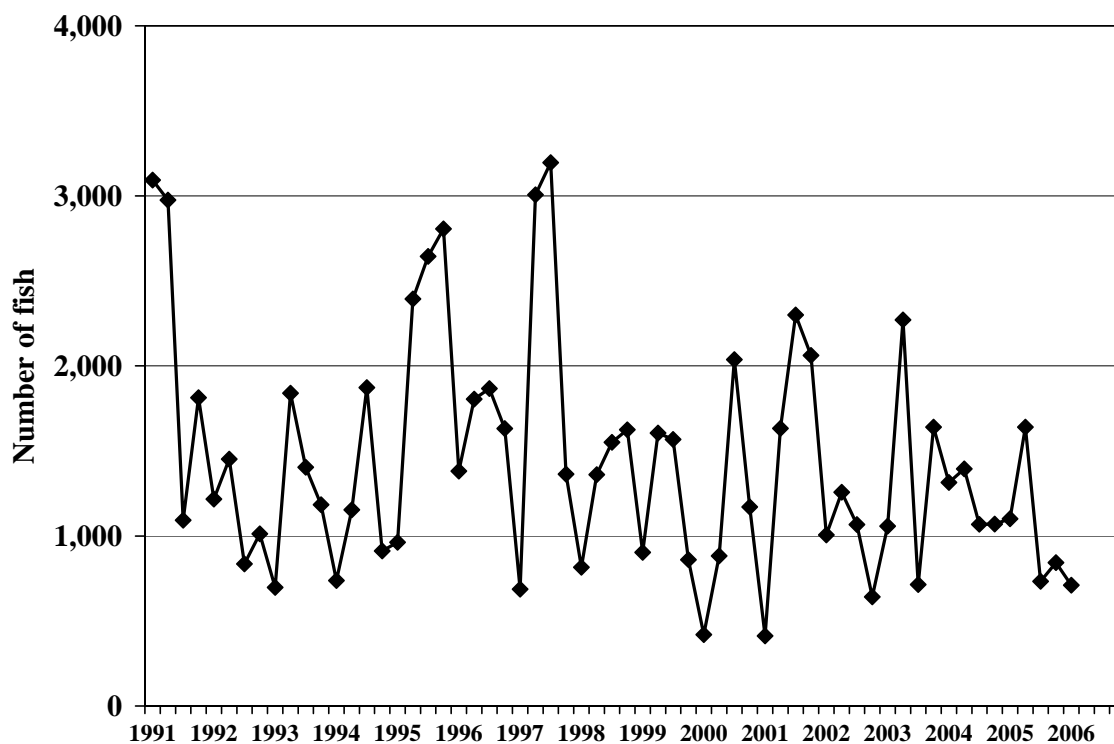


Figure 14.—Hawaii-based longline catch of blue marlin by quarter, 1991-2006.

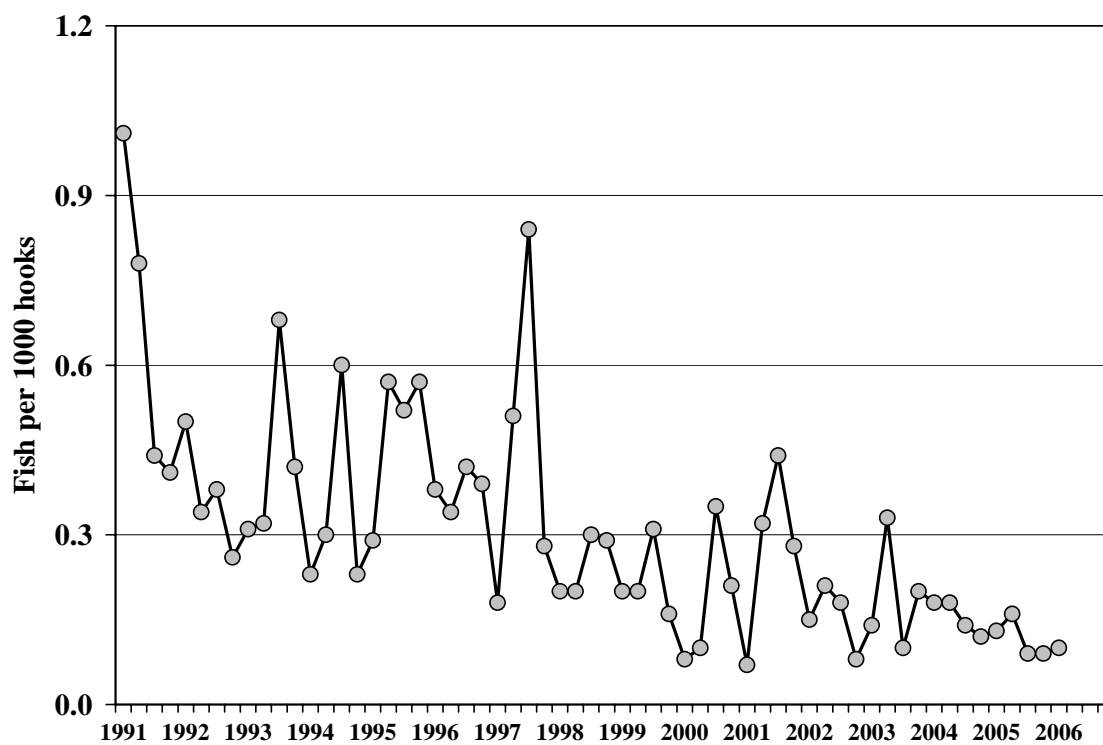


Figure 15.—Blue marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

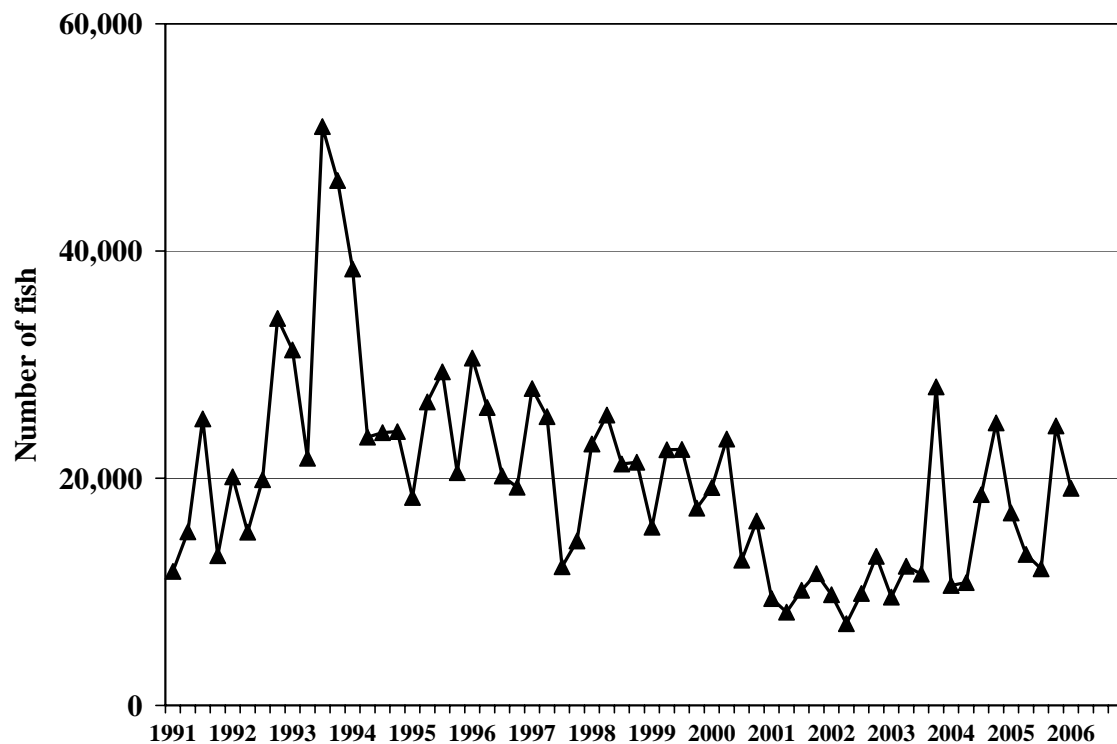


Figure 16.—Hawaii-based longline catch of blue shark by quarter, 1991-2006.

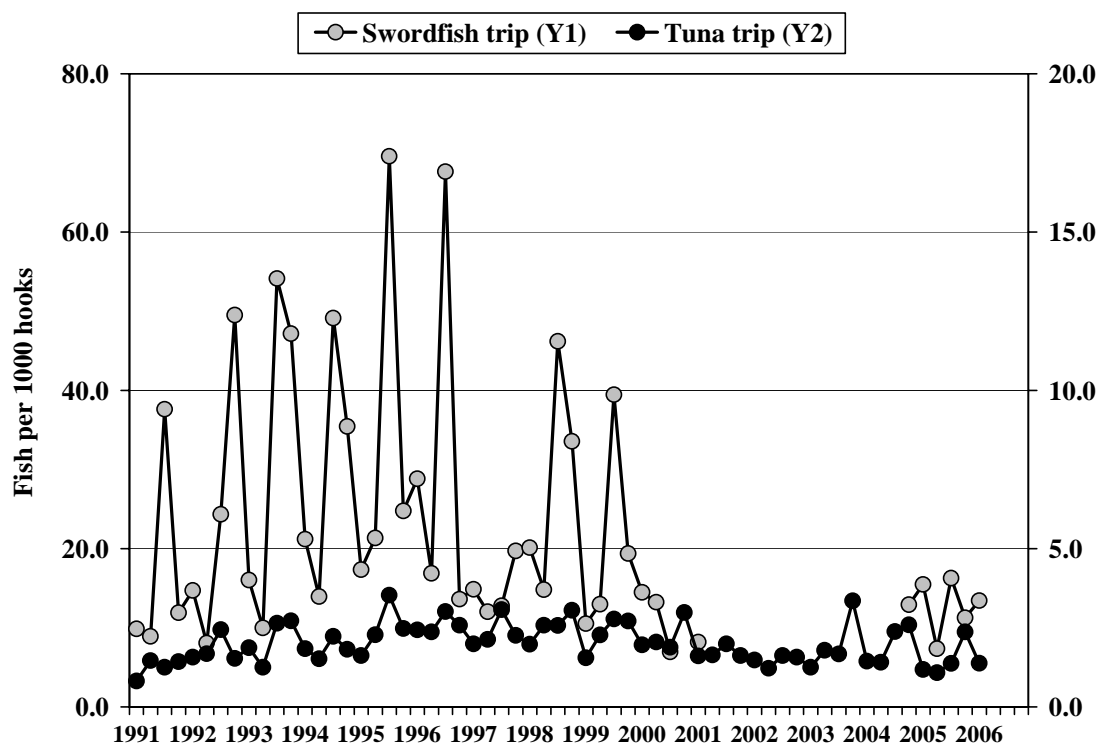


Figure 17.—Blue shark CPUE by quarter, 1991-2006.

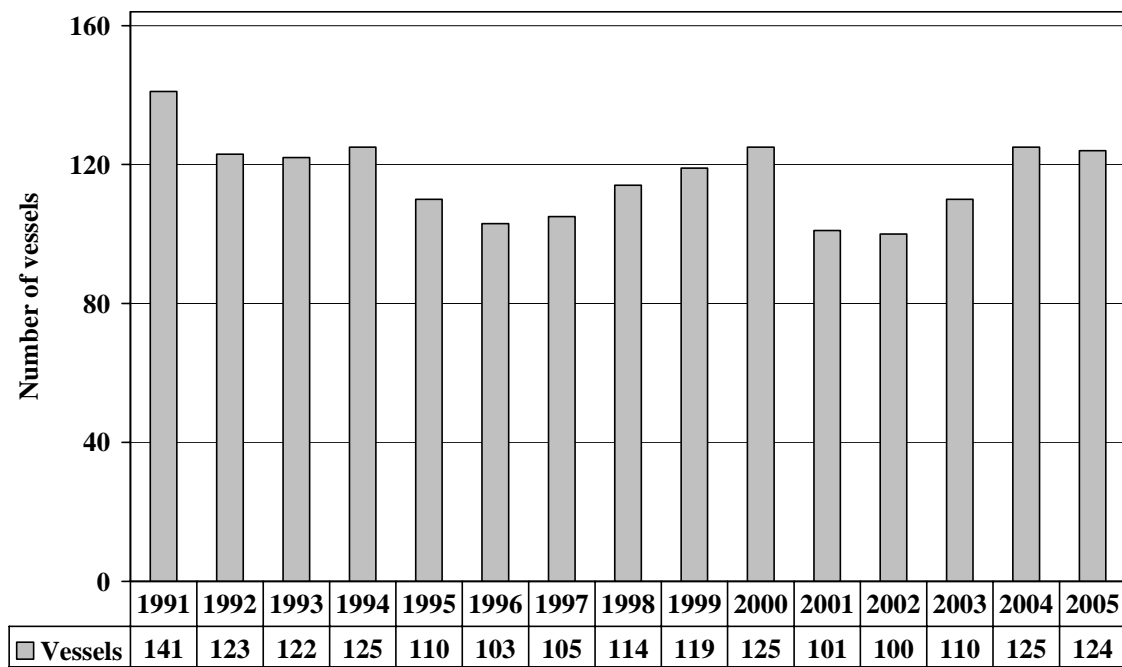


Figure A1.--Number of active Hawaii-based longline vessels, 1991-2005.

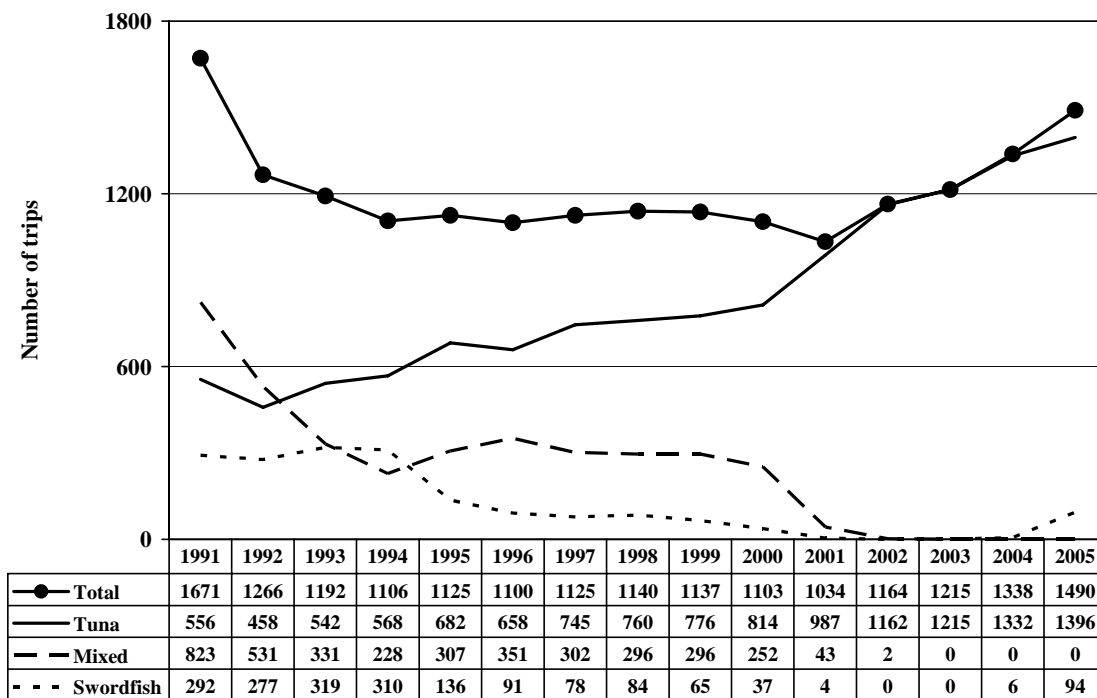


Figure A2.--Number of trips by the Hawaii-based longline fishery, 1991-2005.

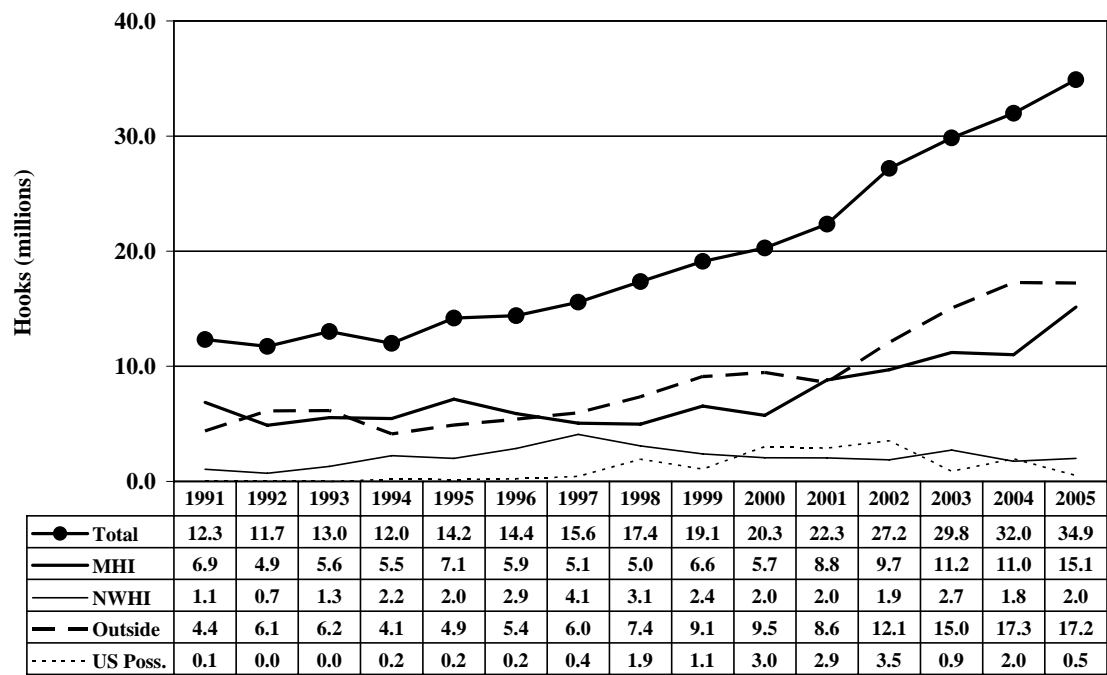


Figure A3.--Number of hooks set by area, 1991-2005.

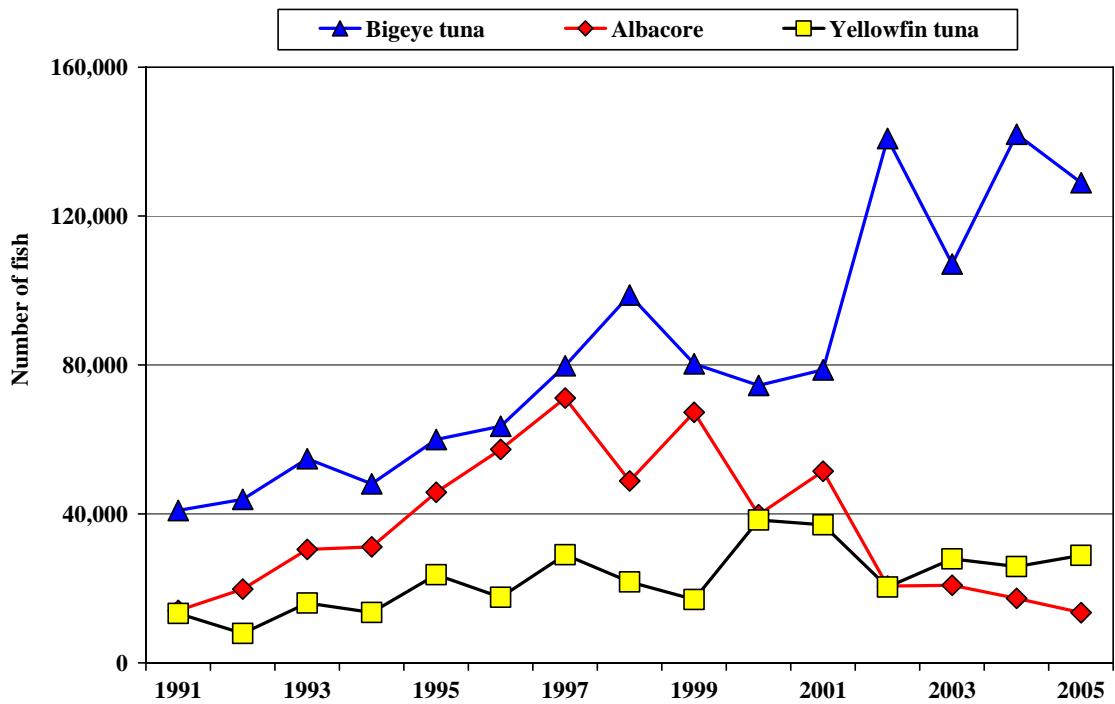


Figure A4.--Tuna catches by the Hawaii-based longline fishery, 1991-2005

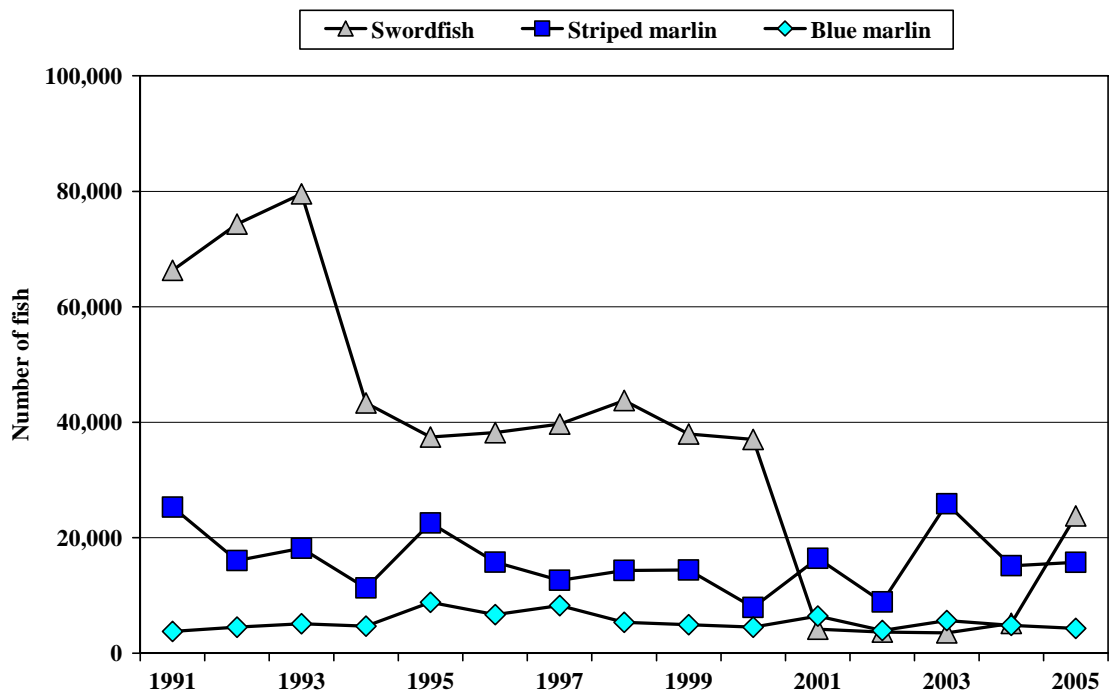


Figure A5.--Billfish catches by the Hawaii-based longline fishery, 1991-2005.

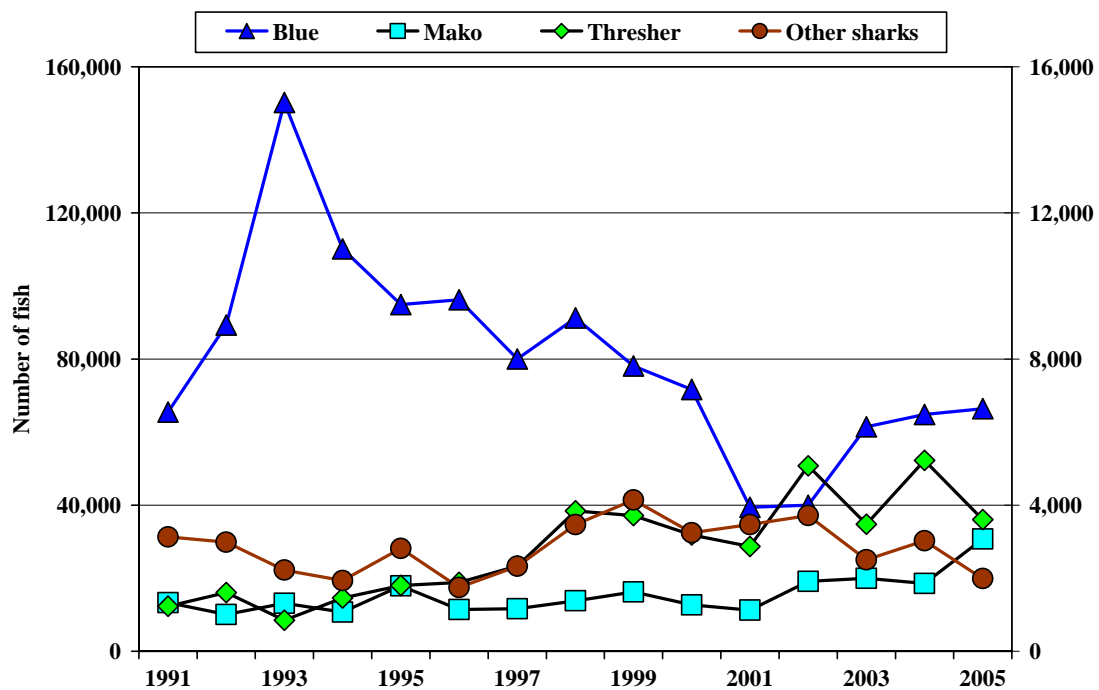


Figure A6.--Shark catches by the Hawaii-based longline fishery, 1991-2005.

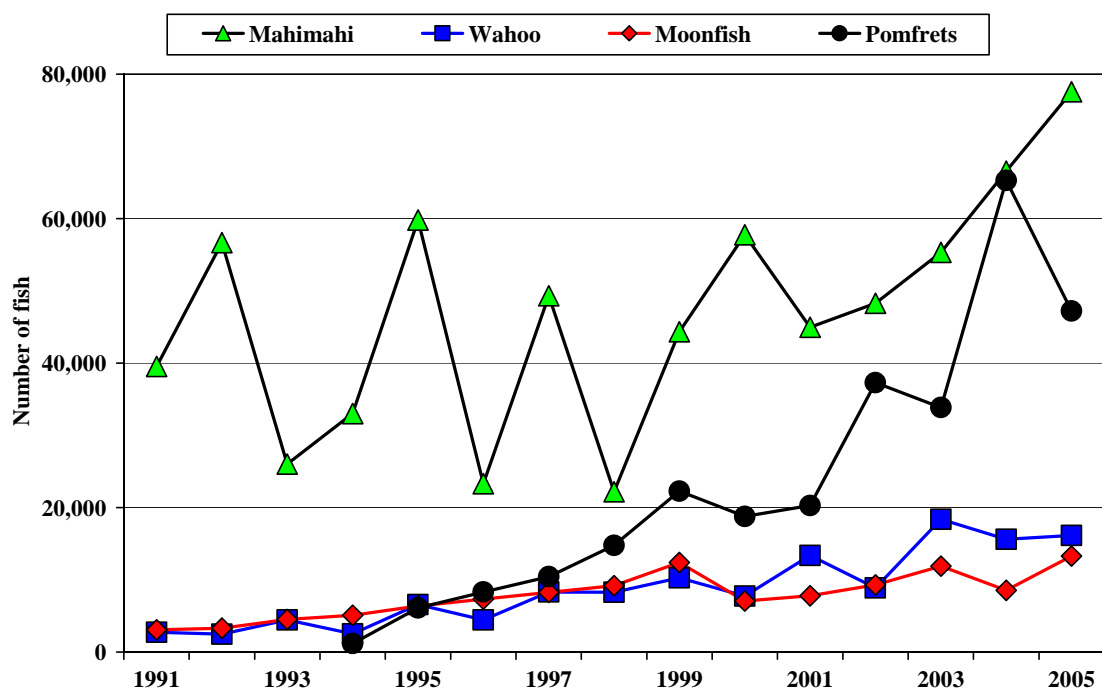


Figure A7.--Catch of miscellaneous pelagic species, 1991-2005.